USER MANUAL

Elo Touch Solutions
4243L/4209L Touchmonitors

SW200174 Rev A

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Chapter 1: Introduction

Product Description

Your new touchmonitor combines the reliable performance of Elo Touch Solutions touch products with the latest developments in touch technology and display design. This combination of features creates a natural flow of information between a user and the touchmonitor.

This widescreen touchmonitor incorporates a 24-bit color, active matrix thin-film-transistor LCD panel to provide high quality display performance. Its Full HD resolution of 1920x1080 is suitable for displaying graphics and images. Its LED backlight significantly reduces power consumption and eliminates mercury (compared to CCFL-backlit panels). Other features that enhance this LCD monitor's performance are Plug & Play compatibility and on-screen display (OSD) controls.

Precautions

Follow all warnings, precautions and maintenance as recommended in this user manual to maximize the life of your unit and prevent risks to user safety. See the Safety & Maintenance chapter for more information.

This manual contains information that is important for the proper setup and maintenance of the unit. Before setting up and powering on your new touchmonitor, read through this manual, especially the Installation, Mounting, and Operation chapters.

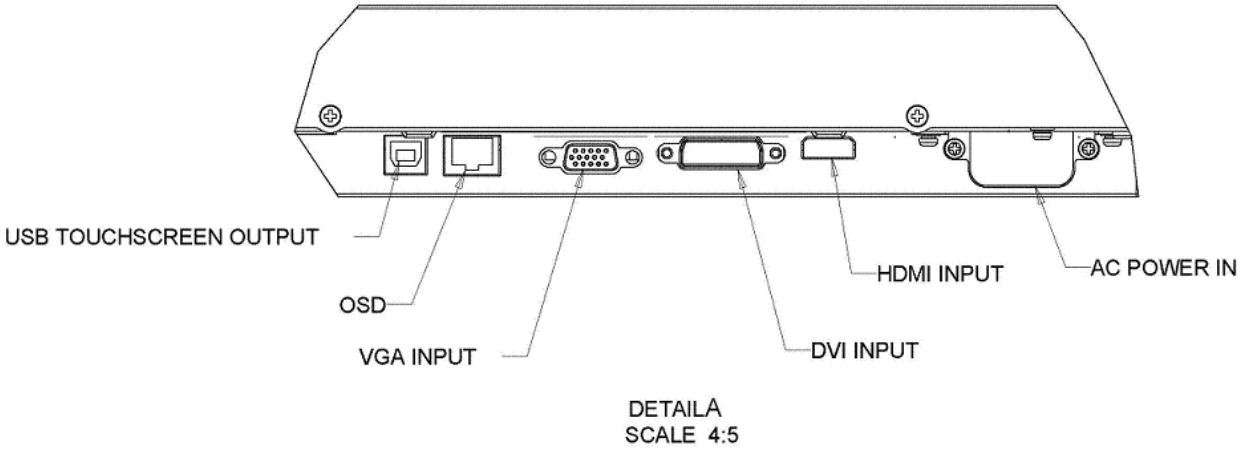
Chapter 2: Installation

Unpacking the Touchmonitor

Open the carton and verify that the following items are present:

- Touchmonitor
- User Manuals CD
- Mounting brackets
- Quick Install Guide
- VGA cable
- HDMI cable (ETX243L-XXWA models only)
- DVI cable (ETX243L-XXAA models only)
- USB cable (not available for ETX243L-0NXX models)
- International power cables
- Japanese language regulatory information pamphlet

Connector Panel & Interfaces



Note: DVI or HDMI are available on certain models only.

Touchmonitor Connections

1. Connect a video cable from your host computer to the monitor. For VGA cables, tighten the video cables screws for best performance.

2. Connect the USB touch cable between the monitors USB connector and your PC's USB port. (Not applicable for No Touch models)

3. Connect the power cable to the monitors input power jack and the AC power outlet.

4. The touchmonitor ships in the ON state.

Chapter 3: Mounting

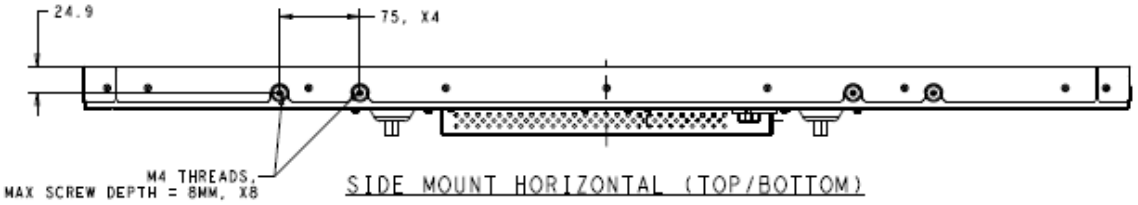
General Mounting Information

The OSD text can be rotated between portrait and landscape mode through the OSD menu to better suit your mounting orientation.

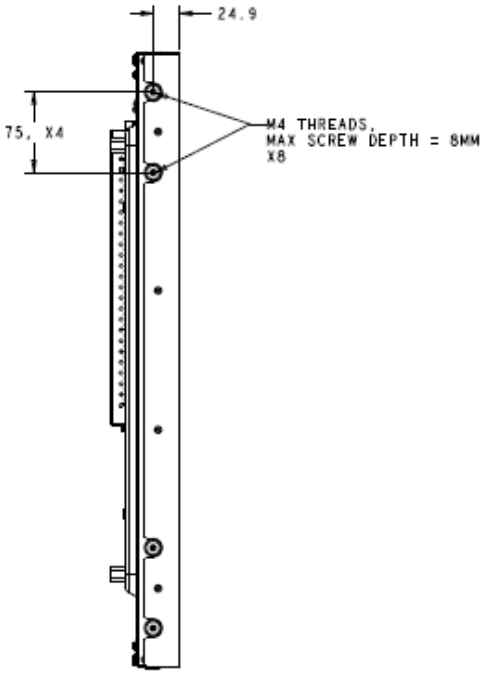
Side Bracket Mount (ET4243L)

Threaded holes are provided on the sides of the monitor for mounting using the provided brackets.

For 4243L monitors:



SIDE MOUNT HORIZONTAL (TOP/BOTTOM)



SIDE MOUNT VERITCAL (LEFT/RIGHT)

Rear VESA Mount

For the 4243L/4209L Monitor:

A four-hole 400x400mm mounting pattern for M6 screws is provided on the rear of the monitor. The VESA FDMI-compliant counting is coded: VESA MIS-F, 400, 400, 6.

Refer to www.elotouch.com for dimensional drawings.

Chapter 4: Operation

Power

To turn the touchmonitor on or off, press the touchmonitor power button on the OSD controller once.

The Power Status LED on the OSD controller functions according to the following table:

TouchMonitor/Computer Module status	LED status
OFF	OFF
SLEEP	PULSING
ON	ON

The system consumes low power when in SLEEP and OFF modes. For detailed power consumption specifications, refer to technical specifications on the Elo website at www.elotouch.com.

Touching the screen will bring the attached host PC out of SLEEP mode (similar to moving the mouse or pressing a keyboard key).

To improve reliability and reduce wasteful power consumption, disconnect the AC power cable from the monitor when long periods of disuse are planned.

Touch

Your touchmonitor is factory-calibrated and does not require manual calibration (unless the input video is not fully scaled to the native resolution, or the touch experience needs to be calibrated to a specific user).

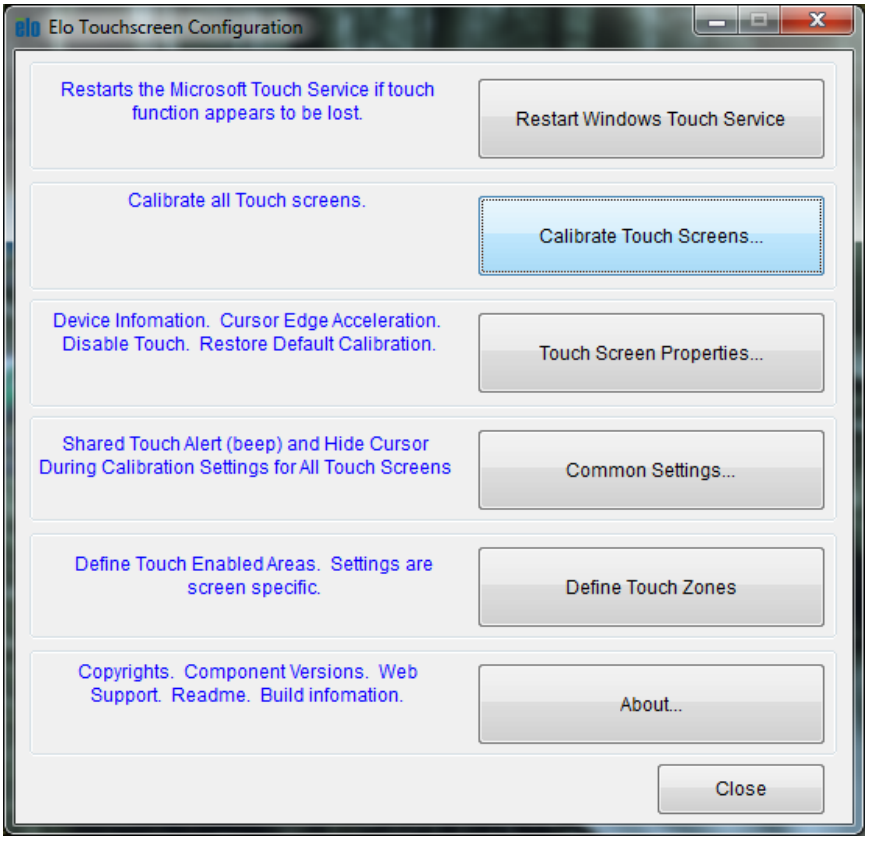
IntelliTouch Plus Touchscreen Technology

When connected to Windows 7 computers, the touchmonitor can report two simultaneous touches. The IntelliTouch Plus touchscreen can be re-calibrated to your displayed video image, if needed, through the calibration function in the Elo driver control panel. The driver can be downloaded from the Elo Touch website.

The IntelliTouch Plus driver will only support multiple monitor if they are all using the IntelliTouch Plus touchscreen technology.

To use multiple IntelliTouch Plus monitors, double click on the EloConfig desktop shortcut to open up the Elo Touchscreen Configuration screen.

Select “Calibrate Touch Screen” to calibrate multiple monitors. Follow the steps that popup to calibrate both touch screens.


Elo Touchscreen Configuration
Restarts the Microsoft Touch Service if touch function appears to be lost.
Restart Windows Touch Service
Calibrate all Touch screens.
Calibrate Touch Screens...
Device Infomation. Cursor Edge Acceleration. Disable Touch. Restore Default Calibration.
Touch Screen Properties...
Shared Touch Alert (beep) and Hide Cursor During Calibration Settings for All Touch Screens
Common Settings...
Define Touch Enabled Areas. Settings are screen specific.
Define Touch Zones
Copyrights. Component Versions. Web Support. Readme. Build infomation.
About...
Close

Gesture Support

The IntelliTouch Plus touch technology enables several gestures that support single and multiple contacts. Refer to the Microsoft Website http://msdn.microsoft.com/en-us/library/dd940543 on the various gestures that are supported in Windows 7.

Video

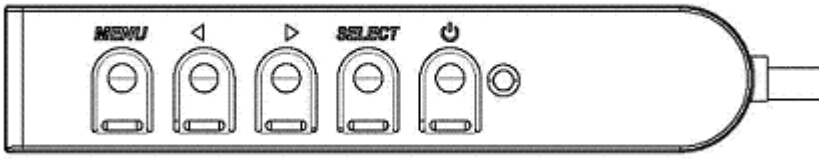
A display's native resolution is its width and height measured in number of pixels. Generally, for best performance, an image displayed on this monitor will look best when your computer's output resolution matches this monitor's native resolution of 1920 x 1080.

For computer output resolutions at non-native resolutions, the monitor will scale the video to its panel's native resolution. This involves stretching or compressing the input image as needed in the X- and Y-dimensions to fit the display's native resolution. An unavoidable byproduct of the scaling algorithms is a loss of fidelity when the computer's output video image is scaled by the monitor to fit the display. This loss of fidelity is most apparent when viewing feature-rich images at close distances (for example images containing small-font text).

Your touchmonitor will likely not require video adjustments. However, for analog VGA video, variations in video graphic card outputs may require user adjustments through the OSD to optimize the quality of the touchmonitor's displayed image. These adjustments are "remembered" by the touchmonitor. Also, to reduce the need for adjustments for different video mode timings, the monitor correctly scales and displays some of the video industry's most common video timing modes. Refer to the technical specifications for this monitor at http://www.elotouch.com for a list of these Preset Video Modes.

On-Screen Display (OSD)

Four OSD buttons are located on a wired control box. These can be used to adjust various display parameters.



The buttons and their functionality are:

Button	Function when OSD is not displayed:	Function when OSD is displayed:
Menu	Display OSD main menu	Return to previous OSD menu
◀	Display OSD Brightness submenu	Increase value of selected parameter / select previous menu item
▶	Display OSD Contrast submenu	Decrease value of selected parameter / select next menu item
Select	Input Select	Select parameter for adjustment / select submenu to enter

Using the OSD buttons controls an on-screen graphical user interface which displays on top of your input video, allowing intuitive adjustment of the following display parameters:

Parameter	Available Adjustment
Brightness	Increase/decrease monitor brightness. Default: maximum
Contrast	Increase/decrease monitor contrast. Default: best gray-shade performance
Clock	Allows fine adjustments of the panel's pixel dot clock. *Only applicable for VGA input video*
Phase	Allows fine adjustments of the panel's pixel dot clock phase. *Only applicable for VGA input video*
Auto Adjust	Automatically adjusts the system clock to the input analog VGA video signal, affecting the H-position, V-position, Clock, and Phase menu items. *Only applicable for VGA input video*
H-position	Moves the image horizontally on the display in single-pixel increments. Default: centered. *Only applicable for VGA input video*
V-position	Moves the image vertically on the display in single-pixel increments. Default: centered. *Only applicable for VGA input video*
Aspect Ratio	Switches the scaling method between Full Scaling and Maintain Aspect Ratio. Default: Full Scaling Full Scaling – scales the X- and Y-dimensions of the input video (up or down as needed) to the display's native resolution. Fill To Aspect Ratio – Assuming a landscape orientation and an input video with aspect ratio smaller than 1920 x 1080, scales the Y-dimension of the input video (up or down as needed) to the display's Y-resolution, and scales the X-dimension to maintain the input video's aspect ratio (and fills the rest of the display with equal black bars on the left and right). *The touchscreen may need recalibration when switching between Aspect Ratio options.*
Sharpness	Adjusts sharpness of the displayed images. Default: no sharpness adjustment *Only applicable at non-native input video resolutions*

Color Temperature	Selects the display's color temperature. The available color temperatures are 9300K, 7500K, 6500K, 5500K, and User Defined. If the User Defined option is selected, the user can change the color temperature by changing individual R, G, and B gains on a scale from 0 to 100. Default: User Defined with R, G, and B all set to 100.
OSD H-Position	Adjusts the horizontal location of the OSD menus on the display Default: centered.
OSD V-Position	Adjusts the vertical location of the OSD menus on the display. Default: centered.
OSD Timeout	Adjusts how long a period of OSD button inactivity the touchmonitor will wait before closing the OSD. The adjustable range is between 5 and 60 seconds. Default: 15 seconds
OSD Language	Selects which language the OSD information is displayed in. The available languages are: English, French, Italian, German, Spanish, Simplified Chinese, Traditional Chinese, and Japanese. Default: English.
OSD Rotation	Selects the touchmonitor mounting orientation between Landscape and Portrait to match your physical orientation. This adjusts the rotation of the OSD text Default: Landscape
Recall Defaults	Selecting "Recall Defaults" restores all factory default settings for OSD-adjustable parameters and for Preset Video Mode timings. Note: This feature does not affect the OSD language setting. For 4243L units, both language and rotation are unaffected.
Video Source	The monitor continually scans for active video on the VGA, DVI, and HDMI connectors. This adjustment selects which of those input ports should be given priority to be displayed. The options are: VGA Priority, HDMI (for ETX243L-XXWA models) or VGA Priority, DVI Priority (for ETX243L-XXAA models) Default: HDMI (for ETX243L-XXWA models) or DVI Priority (for ETX243L-XXAA models)

All touchmonitor adjustments made through the OSD are automatically memorized as soon as they are entered. This feature saves you from having to reset your choices every time the touchmonitor is unplugged or powered off and on. If there is a power failure, the touchmonitor settings will not default to the factory specifications.

OSD and Power Lockouts

Press and hold the "Menu" and "down" buttons for two seconds to enable/disable the OSD Locking feature. When the OSD Locking is enabled, pressing any of the Menu, Up, Down, or Select keys will have no effect on the system.

Press and hold the "Menu" and "up" buttons for two seconds to enable/disable the Power Locking feature. When the Power Locking is enabled, pressing the power switch will have no effect on the system.

Chapter 5: Technical Support

If you are experiencing trouble with your touchmonitor, refer to the following suggestions.

If the problem persists, please contact your local dealer or contact Elo Touch Solutions Customer Service.

Solutions to Common Problems

Problem	Suggested Troubleshooting
The touchmonitor does not respond when turning on the system	Check that the power cable is properly connected.
Monitor display is dim	Use the OSD to increase the brightness. Use the OSD to increase the contrast.
Monitor display is blank	If the Power Status LED is blinking, the monitor or Computer Module may be in SLEEP mode. Press any key / move the mouse / touch the touchscreen to see if the image reappears. Check that the signal source device is turned on. Check that that there are no loose cable connections.
Monitor displays an “Out Of Range” message	Adjust your computer’s resolution/timing mode to be within the allowable timing ranges specified for your touchmonitor (see website for specifications)
Monitor display image looks strange	Adjust your computer’s resolution/timing mode to be within the allowable timing ranges specified for your touchmonitor (see website for specifications) Use the Auto Adjust function in the OSD
Touch functionality doesn’t work	Verify your PC has the latest Elo drivers installed. Perform the calibration routine provided with the latest Elo drivers.
The OSD buttons or power button does not respond when pressed	Check to see if the OSD lock or power lock functions are on

Technical Assistance

Visit www.elotouch.com/products for technical specifications for this device

Visit www.elotouch.com/go/websupport for online self-help.

Visit www.elotouch.com/go/contactsupport for technical support.

See this user manual's last page for worldwide technical support phone numbers.

Chapter 6: Safety & Maintenance

Safety

To avoid risk of electric shock, follow all safety notices and do not disassemble the touchmonitor. They are not user-serviceable.

Ensure that your installation is equipped to maintain the specified environmental conditions listed in the Technical Specifications chapter.

Care and Handling

The following tips will help keep your touchmonitor functioning at an optimal level:

Disconnect the AC power cable before cleaning.

To clean the display unit cabinet, use a clean cloth lightly dampened with a mild detergent.

It is important that your unit remains dry. Do not get liquids on or inside the unit. If liquid does get inside, have a qualified service technician check it before you power it on again.

Do not wipe the screen with a cloth or sponge that could scratch the surface.

To clean the touchscreen, use window or glass cleaner applied to a clean cloth or sponge. Never apply the cleaner directly to the touchscreen. Do not use alcohol (methyl, ethyl or isopropyl), thinner, benzene, or other abrasive cleaners.

Waste Electrical & Electronic Equipment Directive (WEEE)

This product should not be disposed of with household waste. It should be deposited at a facility that enables recovery and recycling.

Chapter 7: Regulatory Information

I. Electrical Safety Information:

Compliance is required with respect to the voltage, frequency, and current requirements indicated on the manufacturer's label. Connection to a different power source than those specified herein will likely result in improper operation, damage to the equipment or pose a fire hazard if the limitations are not followed.

There are no operator serviceable parts inside this equipment. There are hazardous voltages generated by this equipment which constitute a safety hazard. Service should be provided only by a qualified service technician.

Contact a qualified electrician or the manufacturer if there are questions about the installation prior to connecting the equipment to mains power.

II. Emissions and Immunity Information

Notice to Users in the United States: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

Notice to Users in Canada: This equipment complies with the Class A limits for radio noise emissions from digital apparatus as established by the Radio Interference Regulations of Industrial Canada.

Notice to Users in the European Union: Use only the provided power cords and interconnecting cabling provided with the equipment. Substitution of provided cords and cabling may compromise electrical safety or CE Mark Certification for emissions or immunity as required by the following standards:

This Information Technology Equipment (ITE) is required to have a CE Mark on the Manufacturer's label which means that the equipment has been tested to the following Directives and Standards: This equipment has been tested to the requirements for the CE Mark

as required by EMC Directive 2004/108/EC as indicated in European Standard EN 55022 Class B and the Low Voltage Directive 2006/95/EC as indicated in European Standard EN 60950.

General Information to all Users: This equipment generates, uses and can radiate radio frequency energy. If not installed and used according to this manual the equipment may cause interference with radio and television communications. There is, however, no guarantee that interference will not occur in any particular installation due to site-specific factors.

1) In order to meet emission and immunity requirements, the user must observe the following:

a) Use only the provided I/O cables to connect this digital device with any computer.

b) To ensure compliance, use only the provided manufacturer's approved line cord.

c) The user is cautioned that changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

2) If this equipment appears to cause interference with radio or television reception, or any other device:

a) Verify as an emission source by turning the equipment off and on.

If you determine that this equipment is causing the interference, try to correct the interference by using one or more of the following measures:

i) Move the digital device away from the affected receiver.

ii) Reposition (turn) the digital device with respect to the affected receiver.

iii) Reorient the affected receiver's antenna.

iv) Plug the digital device into a different AC outlet so the digital device and the receiver are on different branch circuits.

v) Disconnect and remove any I/O cables that the digital device does not use.(Unterminated I/O cables are a potential source of high RF emission levels.)

vi) Plug the digital device into only a grounded outlet receptacle. Do not use AC adapter plugs. (Removing or cutting the line cord ground may in crease RF emission levels and may also present a lethal shock hazard to the user.)

If you need additional help, consult your dealer, manufacturer, or an experienced radio or television technician.

III. Agency Certifications

The following certifications and marks have been issued or declared for this monitor:

Argentina S-Mark
Australia RCM
Canada CUL, IC
China CCC
Europe CE
Japan VCCI
Korea KCC, e-Standby
Mexico CoC
Russia EAC
Taiwan BSMI
United States FCC, UL

IV. China RoHS

In accordance to Chinese law (Administration on the Control of Pollution Caused by Electronic Information Products), the section below lists out the name and amount of the toxic and/or hazardous materials that this product may contain.

Component Name	Toxic or Hazardous Substances and Elements					
	Lead(Pb)	Mercury(Hg)	Cadmium(Cd)	Hexavalent Chromium (Cr6+)	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Plastic Parts	O	O	O	O	O	O
Metal Parts	X	O	O	O	O	O
Wire and Cable Assembly	X	O	O	O	O	O
LCD Panel	X	O	O	O	O	O
Touch Screen Panel	X	O	O	O	O	O
PCBA	X	O	O	O	O	O
Software (CD, etc.)	O	O	O	O	O	O

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this component is below the limit requirement in SJ/T11363-2006.
X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this component is above the limit requirement in SJ/T11363-2006. For items marked with X, exemptions were taken according to EU RoHS.

Explanation of Markings

(1). In accordance with the SJ/T11364-2006 requirement, the electronic information products are marked with the following pollution control logo. The Environment-Friendly Use Period for this product is 10 years. The product will not leak or mutate under normal operating conditions listed below, so that the use of this electronic information product will not result in any severe environmental pollution, any bodily injury, or damage to any assets.

Operating Temperature:0-40 / Humidity:20%-80% (non-condensing).

Storage Temperature:-20~60 / Humidity:10%~90% (non-condensing).

(2). It is encouraged and recommended that this product be recycled and reused according to local laws. The product should not be thrown away casually.

V. Monitor Specifications
Electrical Ratings:
Input: 100 - 240VAC, 50/60Hz, 2.5A
Operating Conditions:
Temperature: 0°C - 40°C
Humidity: 20% to 80% (non-condensing)
Altitude: 0 to 3,658m
Storage Conditions:
Temperature: -20°C - 60°C
Humidity: 10% to 90% (non-condensing)
Altitude: 0 to 12,192m

Chapter 8: Warranty Information

For warranty information, go to http://www.elotouch.com/Support/warranty.asp

Check out our website

www.elotouch.com

Get the latest...

- Product Information
- Specifications
- Upcoming events
- Press releases
- Software drivers

Getting in Touch with Us

To find out more about the extensive range of Elo touch solutions, visit our website at www.elotouch.com, or simply call the office nearest you:

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